

[0123] a processor 1810, a communications interface 1820, a memory 1830, and a communications bus 1840, wherein:

[0124] the processor 1810, the communications interface 1820, and the memory 1830 communicate with each other by using the communications bus 1840.

[0125] The communications interface 1820 is configured to communicate with another network element.

[0126] The processor 1810 is configured to execute a program 1832, and specifically, may be configured to execute related steps in the method embodiment shown in FIG. 1.

[0127] Specifically, the program 1832 may comprise program code, wherein the program code comprises a computer operation instruction.

[0128] The processor 1810 may be a central processing unit (CPU), or an application specific integrated circuit (ASIC), or one or more integrated circuits configured to implement the embodiments of the present application.

[0129] The memory 1830 is configured to store the program 1832. The memory 1830 may comprise a high speed random access memory (RAM), or a non-volatile memory, for example, at least one magnetic memory. The program 1832 specifically may execute the following step:

[0130] in response to that a user body touches an object, sending a second mechanical wave that is used to form a haptic signal at a touch position of the object with a first mechanical wave generated by the user body.

[0131] For specific implementations of the steps in the program 1832, reference may be made to corresponding steps or modules in the foregoing embodiments, and no further details are provided herein again. A person skilled in the art may clearly know that, for convenient and brief description, for the specific working process of the foregoing apparatus and module, reference may be made to the corresponding descriptions in the foregoing method embodiment, and no further details are provided herein again.

[0132] A hardware structure of a haptic feedback generation apparatus according to an embodiment of the present application is shown in FIG. 19. The specific embodiment of the present application does not limit a specific implementation of the haptic feedback generation apparatus. Referring to FIG. 19, the apparatus 1900 may comprise:

[0133] a processor 1910, a communications interface 1920, a memory 1930, and a communications bus 1940, wherein:

[0134] the processor 1910, the communications interface 1920, and the memory 1930 communicate with each other by using the communications bus 1940.

[0135] The communications interface 1920 is configured to communicate with another network element.

[0136] The processor 1910 is configured to execute a program 1932, and specifically, may be configured to execute related steps in the method embodiment shown in FIG. 5.

[0137] Specifically, the program 1932 may comprise program code, wherein the program code comprises a computer operation instruction.

[0138] The processor 1910 may be a central processing unit (CPU), or an application specific integrated circuit (ASIC), or one or more integrated circuits configured to implement the embodiments of the present application.

[0139] The memory 1930 is configured to store the program 1932. The memory 1930 may comprise a high speed

RAM memory, or a non-volatile memory, for example, at least one magnetic memory. The program 1932 specifically may execute the following step:

[0140] in response to that a user body touches an object, sending, to the object through a medium, a second mechanical wave that is used to form a haptic signal at a touch position of the object with a first mechanical wave generated by the object, wherein the medium comprises at least one part of the user body.

[0141] For specific implementations of the steps in the program 1932, reference may be made to corresponding steps or modules in the foregoing embodiments, and no further details are provided herein again. A person skilled in the art may clearly know that, for convenient and brief description, for the specific working process of the foregoing apparatus and module, reference may be made to the corresponding descriptions in the foregoing method embodiment, and no further details are provided herein again.

[0142] A person of ordinary skill in the art may be aware that, with reference to the examples described in the embodiments disclosed in this specification, units and algorithm steps may be implemented by electronic hardware, or a combination of computer software and electronic hardware. Whether the functions are performed by hardware or software depends on particular applications and design constraint conditions of the technical solutions. A person skilled in the art may use different methods to implement the described functions for each particular application, but it should not be considered that the implementation goes beyond the scope of the present application.

[0143] When the functions are implemented in a form of a software functional unit and sold or used as an independent product, the functions may be stored in a computer-readable storage medium. Based on such an understanding, the technical solutions of the present application essentially, or the part contributing to the prior art, or a part of the technical solutions may be implemented in a form of a software product. The computer software product is stored in a storage medium, and comprises several instructions for instructing a computer device (which may be a personal computer, a controller, a network device, or the like) to perform all or a part of the steps of the methods described in the embodiments of the present application. The foregoing storage medium comprises: any medium that can store program code, such as a USB flash drive, a removable hard disk, a read-only memory (ROM), a RAM, a magnetic disk, or an optical disc.

[0144] The foregoing example embodiments are merely used for describing the present application, rather than limiting the present application. A person of ordinary skill in the art may make various changes and modifications without departing from the spirit and scope of the present application, and therefore, all equivalent technical solutions shall belong to the scope of the present application, and the protection scope of the present application shall be subject to the claims.

What is claimed is:

1. A method, comprising:

in response to determining that a user body has touched an object, sending, by a device comprising a processor, a second mechanical wave that is used to form a haptic signal at a touch position of the object with a first mechanical wave generated by the user body.